



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/593,539

09/19/2006

Tasuku Teshirogi

06550/LH

4913

1933 7590 04/17/2009  
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC  
220 Fifth Avenue  
16TH Floor  
NEW YORK, NY 10001-7708

EXAMINER

GALT, CASSI J

ART UNIT

PAPER NUMBER

3662

MAIL DATE

DELIVERY MODE

04/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/593,539	Applicant(s) TESHIROGI ET AL.	
	Examiner CASSI GALT	Art Unit 3662	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 06 April 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see continuation sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Thomas H. Tarcza/  
Supervisory Patent Examiner, Art Unit 3662

/C. G./  
Examiner, Art Unit 3662

Regarding Applicant's argument that the oscillation unit of Puglia differs from the present claimed invention in that it inherently continuously generates oscillations and thus causes carrier leakage, Examiner respectfully disagrees. Applicant has not provided and Examiner cannot find support in Puglia for Applicant's assertion that the oscillator inherently continuously generates oscillations. Puglia is largely silent regarding the properties of the oscillator, teaching only that "[t]he pulse oscillator 106 is responsive to the "on" pulse by providing a first signal for the time that the "on" pulse is active, i.e., for the predetermined pulsewidth" (3:42-45).

Regarding the Bosch reference figures and text, Examiner finds that the structure of Bosch's UWB system is different from Puglia's. Bosch teaches an oscillator that indeed appears to continuously generate oscillations. The oscillator signal is provided to the transmit antenna via an "HF Modulation switch TX". Puglia does not teach such a structure, and Examiner therefore finds no reason to believe that Puglia's system necessarily suffers the same leakage as Bosch's system.

Regarding Applicant's argument that Puglia cannot be modified in view of other cited prior art references to prevent such carrier leakage, Examiner respectfully disagrees. With Puglia largely silent regarding the properties of the oscillator, Examiner asserts that an oscillator of some sort must be provided, and that oscillators with the claimed properties are known in the art. In particular, in the final rejection dated 1/5/2009, Examiner set forth that Anderson (US 5,146,613) teaches an oscillator with the properties set forth in claims 21 and 22, and Khanna (US 4,733,199) teaches an oscillator with the properties set forth in claims 23 and 24.

Regarding Applicant's argument that Anderson does not teach or suggest that the switch sets the oscillator 20 in an oscillation state only in a period in which the pulse signal output from the pulse generator is received, but rather, the oscillator 20 is continually operating irrespective of receipt of a pulse signal from the pulse generator, and only its output is toggled based on the position of the switch, Applicant has not provided and Examiner cannot find support in Anderson for this assertion. Rather, Examiner finds that Anderson teaches the contrary: "data source 28, when connected to the inverting amplifier 22 by the switch 30, produces pulse width modulated voltage pulses corresponding to data to be transmitted and thus turns the oscillator 20 on and off in accordance with the voltage pulses to generate bursts of RF oscillation" (2:48-53).

Regarding Applicant's argument that Khanna describes that signals from dielectric resonator oscillators leak through the switch to create unwanted spurious signals in the output (column 1, line 67 to column 2, line 2), Examiner would like to point out that Khanna is here referring to a problem with prior art oscillators. Khanna's oscillator, on the other hand, is designed to overcome this problem, as described at 2:52-60: "The switchable, multi-frequency, parallel-feedback, dielectric-resonator oscillator of the present invention offers several advantages over prior art multiple frequency oscillators. First, there are no spurious, unselected frequencies in the output signal because the non-selected dielectric resonators are passive components which do not themselves oscillate. Only when a dielectric resonator is selectively coupled to the amplifier through the switch is a signal generated."

Regarding Applicant's argument that Khanna describes that when a dielectric resonator is selectively coupled to the amplifier through the switch, a signal is generated (column 2, lines 58-60) and an amplifier is always turned on to cause signals to be generated upon selection of one of the dielectric resonators (column 2, line 67 to column 3, line 2), Examiner is unclear regarding the relevance of this teaching. Claims 23 and 24 require only "a switch circuit which sets the oscillation unit in an oscillation state only in a period in which the pulse signal output from the pulse generator is received", which Examiner has asserted is taught by Khanna at 2:55-60. The claim does not require anything of the amplifier.

In conclusion, regarding the claim limitation "without causing carrier leakage", Examiner would like to reassert that the prior art teaches every structural element of claims 21-24, and therefore presumably also operates without causing carrier leakage.